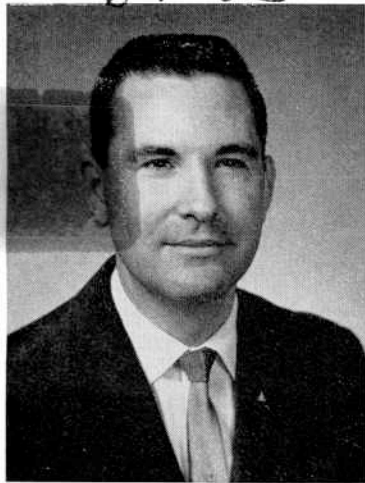


## Fabrication Division Promotes Evans And Ferguson On March 1



James L. Evans



Spencer F. Ferguson

The Fabrication Division has announced two promotions, effective March 1.

James L. Evans, a planner and estimator in the General Shop has been named as a foreman in 9201-1.

Evans, a native of Caryville, lives at Route 2, there. He is a graduate of Jacksboro High School, and is married to the former Kathryn Marie Brantley. They have two children . . . Linda Sue, a sophomore at Jacksboro High, and a son Joe Leslie, in grade school at Caryville.

Evans worked with the Screw Machine Products Company, La-Port, Indiana, and with his father in the lumber business before coming to Y-12 May 5, 1954.

In his spare time Jim says he likes to grouse hunt and usually gets in on at least one deer hunt a year.

Spencer F. Ferguson, also a planner and estimator is made a machine tool specialist March 1

in Beta Four Heavy Machine Shop.

Ferguson, a native of Knoxville, is a veteran of the U. S. Navy. He graduated from Knoxville High School and attended the University of Tennessee before coming here. He was briefly employed with Dempster Brothers, the Wilson Wheeler Wilkinson Company and Dunsmore Printing, Knoxville. He came here July 6, 1959.

The Fergusons live at 134 Athens Road, Oak Ridge. Spence's wife Donna, also a Y-12er, is in Product Engineering. They have two small sons . . . Don and Spence. Ferguson is an avid bowler, and in summer participates in the Softball leagues.

### POLLS APART

Man at the door answering poll-taker: "That's my opinion. I can give you my wife's if you wish. It would be just the opposite of mine."

ORNL 15701

## Safety Awards Will Be Issued Tuesday

The Safety Department reports that all 1967 awards have been received. Distribution will take place next week, according to Safety, at the following hours:

**Tuesday, March 12**  
2 to 5 p.m.

**Wednesday, March 13**  
6:30 to 8 a.m.  
2 to 5 p.m.

**Thursday, March 13**  
6:30 to 8 a.m.

Your award will be at the portal you designated on the selection card. If you have transferred to another portal, since that time, go back to your old portal-of-entry.

Due to the size and bulk of the big awards, Safety urges the prompt pick-up of the individual awards.

See you next week.

## AEC Leases Building To Civil Air Patrol

The Atomic Energy Commission has made a small building available to the Oak Ridge Squadron of the Civil Air Patrol for use in their programs of air search and rescue and aerospace education training.

The building provided by the AEC is known as the Midway Gate House and is located on Scarboro Road near the Bear Creek entrance to the Y-12 Plant. (It was the former location of Y-12's Credit Union.)

Under a one-year permit agreement, which became effective in early February, the Oak Ridge Civil Air Patrol Squadron is authorized to use the building as a headquarters and for training purposes.

## Sapirie Foresees Bright Future For Ridge Operations

S. R. Sapirie, Manager of the Atomic Energy Commission's Oak Ridge Operations, recently predicted the annual revenue from uranium enrichment services by the AEC's gaseous diffusion plants would total some \$100 million by 1970. He said this would increase to over \$900 million annually by 1980.

Speaking before the Oak Ridge Rotary Club, Sapirie outlined a bright future for Oak Ridge in the nation's atomic energy programs. Along with the AEC's gaseous diffusion program, Sapirie also commented on recent increases in the weapons program at the Y-12 Plant and pointed out the importance of current programs being conducted by the Oak Ridge National Laboratory.

"The 1967 experience continues to demonstrate the fact that early projections of growth in use of nuclear power were overly conservative," Sapirie said. He estimated the total nuclear power capacity by 1980 will probably be on the high side of current AEC estimates, or about 170 million kilowatts.

His estimates of annual revenue from uranium enrichment services are based on the published AEC charge of \$26 per unit of separative work — the price yardstick for uranium enrichment service.

Oak Ridge Operations, which is responsible for the AEC's three gaseous diffusion plants, located at Oak Ridge; Portsmouth, Ohio; and Paducah, Kentucky, currently produces all enriched uranium required for peaceful and military programs in this country.

### Estimates Are Upped

"The recent year's trend of shifting to nuclear power by the electric utility industry supports our high estimates," Sapirie said, "and gives us a basis for firm planning for again increasing the rate of production for the gaseous diffusion plants."

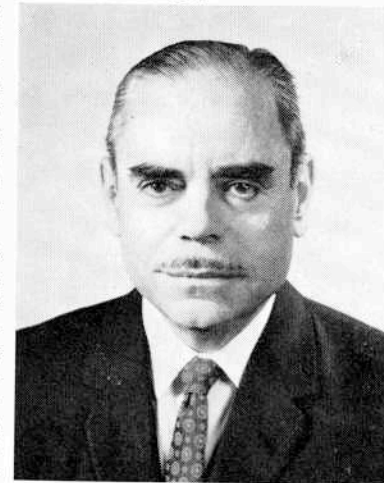
Sapirie said new power supply contracts recently signed will permit restoration of about two million kilowatts of power at the three diffusion plants in fiscal years 1971 and 1972, reversing the trend of the past few years. The plants are now operating at less than the six million kilowatt capacity of the early 1960's, and will reach a low level of two million kilowatts by April of next year.

"We have also invited proposals for additional power for later restoration so as to again operate at full capacity, probably by the mid-1970's," he added.

### Modification Programs

Sapirie outlined other changes such as long range equipment modification programs at the gaseous diffusion plants and new plant construction ultimately required to meet needs for nuclear power production estimated at about 500 million kilowatts by 1990 and one billion kilowatts by the end of the century. These plans include

—beefing up current spending on a five and one-half million dollar process development program. Coupled with this would be a similar increase in the present proof testing program now carried out in the three plants to



S. R. Sapirie

evaluate the best results of the process development effort.

—planning now for incorporating the results of the process development programs into the three plants in the mid-1970's with an estimated cost of several hundred million dollars over six or seven years.

"The beauty of this approach," said Sapirie, "is that it adds substantial amounts of capacity at less unit cost than that estimated for new plants and can be operated without additional labor, power or feed—a real bargain."

### Electricity Predictions

For the late 1970's a follow-on program is being planned that would provide even more plant capacity by increasing electric power consumption one-fourth or one-third at an additional cost of approximately one hundred million dollars for the three plants.

Sapirie said extrapolation any further ahead than the late 1970's gets somewhat unreliable, but he added that a rough estimate of requirements indicates need for a new diffusion plant each year for several years beginning in 1980.

This tremendous growth in demand for enriched uranium will begin to taper off, according to Sapirie, when breeder reactors the AEC is presently developing are on stream. These "breeders" are designed to produce fissionable material at a rate slightly above the rate at which it is being consumed.

### 'Breeder' Reactors

"However, even after breeders are available it will take from 10 to 20 years before they have much impact on reducing the requirements for enriching services," Sapirie said. "Indications are that the better breeder reactors will take about 10 years to produce enough surplus feed to

Continued on Page 4



**THE EAST TENNESSEE HEALTH PHYSICS SOCIETY** recently installed officers for the 1968 term. From left, are Y-12's Merwyn Sanders, president; Fred Haywood, ORNL, president-elect; Jack Bailey, K-25, councilman; Howell Butler, ORNL, councilman; and J. M. Davis, ORNL, secretary. Dorothy Soard, treasurer, is seated.

## SAFETY SCOREBOARD

The Y-12 Plant Has  
Operated  
**67 Days Or**  
**1,946,000 Man-Hours**  
(Unofficial Estimate)  
**Through March 3**  
Without a Disabling  
Injury  
**Safety At Home**  
**At Work, At Play**



# The Bulletin

Published Weekly For The  
Y-12 Employees Of  
UNION CARBIDE  
CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG Editor

Member Appalachian  
Industrial  
Editor's  
Association

American Association Industrial Editors

OFFICE

Post Office Box Y  
Oak Ridge, Tenn. 37830  
Telephone 3-7100

## Sylvia Lay Named ORAU Valentine



Sylvia Lay

Sylvia, daughter of John Lay Jr., Product Information Center, was named Valentine Queen recently at the Oak Ridge Associated Universities Dance. The dance was held Friday, February 9. Sylvia is employed in the Information and Exhibits Division at ORAU.

Sylvia is a 1965 graduate of Oak Ridge High School.

## ASTME Installs Officers Saturday

The Knoxville - Oak Ridge Chapter of the American Society of Tool and Manufacturing Engineers will hold installation ceremonies Saturday, March 9. The meeting will begin Saturday, March 9, at 6:30 p.m. with a social hour at Beaver Brook Country Club, Knoxville. Dinner will follow at 7.

A buffet dinner and dance is planned for the meeting with music to be provided by Bob Agee's orchestra.

To be installed are 1968 officers: Mike Shemanski, Y-12, chapter chairman; Paul Boyer, Y-12, 1st vice president; C. L. Bateman, Tool Crib, 2nd Vice chairman; T. W. Robinson, Y-12, 3rd vice chairman; B. G. Myers, Y-12, secretary; and L. A. Smith, ORGDP, treasurer.

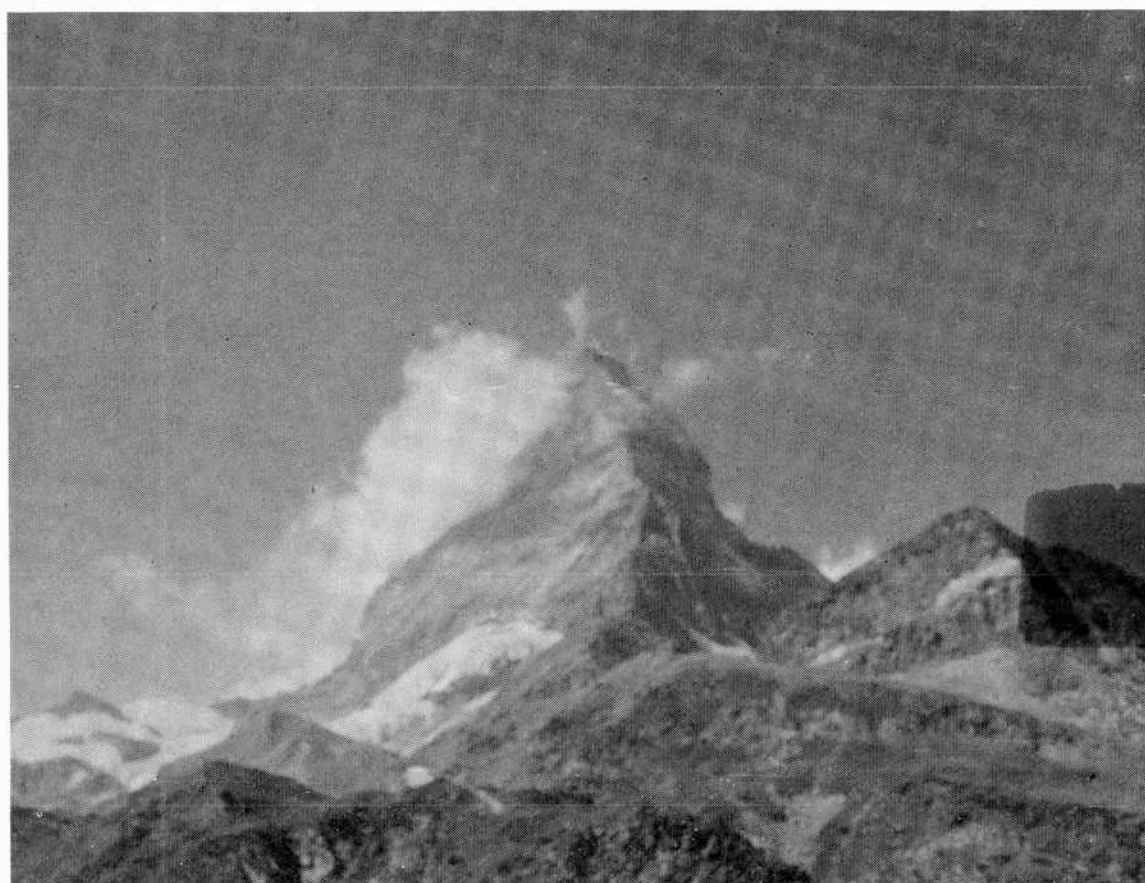
All members, wives and interested guests are urged to attend Saturday's meeting.

## ChemTech To Hold St. Pat's Dance

ORNL's Chemical Technology Division is inviting friends to their St. Patrick's Day Dance, to be held Friday, March 15. It will be in the newly remodeled American Legion Hall, Oak Ridge. The social hour begins at 8 p.m. . . . and dancing gets underway at 9 p.m. to the tunes of Alan Atkin.

The intermission program will feature a skit entitled "Do You Remember" and will include highlights of past skits plus some new surprises. Selection of the "Queen of the Green" will be made on the basis of the greenest ensemble; door prizes will also be awarded. For those who wish, breakfast may be obtained at Shoney's in Oak Ridge.

Tickets are available from section secretaries at an advance price of \$2.50, and at the door at a higher price.



BILL HARPER, DEVELOPMENT, is proud of this beautiful color snapshot of the Matterhorn. His colored slide took honors recently in Carbide Camera Club competition. Bill will serve as 1968 president of the Camera Club.

## Camera Club Will View PSA Prints

"Portfolio of Portfolios," a slide show with commentary, will be presented at the Carbide Camera Club's regular meeting next Tuesday, March 12. The meeting is set for 8 p.m. in Fellowship Hall of the First Presbyterian Church, Oak Ridge. These portfolios or black and white prints were selected for excellence by the Photographic Society of America.

Entries in the club's March competition, "Open" will be judged. Winners in the February competition, "Shadows," included Anna Dobbins and Bill Harper of Y-12; Lee Andrews, Peggy Turner and W. H. Russell, Biology Division.

The Carbide Camera Club usually meets on the second Tuesday of each month. The April meeting will be held on the third Tuesday, however, April 16, to accommodate an out-of-town speaker of unusual interest.

The Camera Club is open to membership to any Union Carbide Corporation employee and members of his family. A nominal dues is collected annually.

## AWS Vice President Is Speaker At Meeting

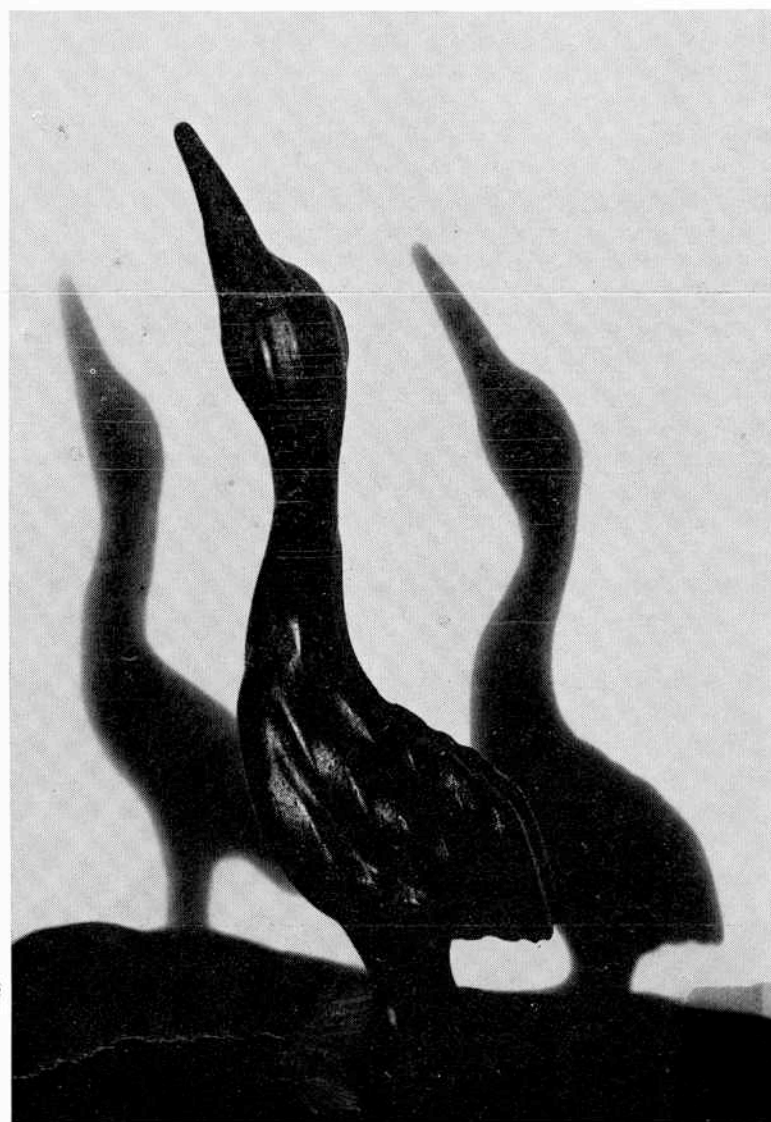
G. E. Linnert, vice president of the American Welding Society, will address the local chapter next Tuesday.

The meeting is set for 6:30 Tuesday, March 12, at the Alexander Motor Inn, Oak Ridge.

Reservations may be made for dinner through C. R. Eichelberger, extension 3-5851, or Knoxville telephone number 583-8661.

## Traffic Signs May Be Identified By Shape

Learn the shape of a stop sign. Stop signs are put at important street intersections to help you not have an accident. Keep your eye out for them and come to a complete stop every time.



SHADOWS . . . BY PEGGY TURNER took top honors in February competition for the Carbide Camera Club. March's competition is announced as "Open" which means anything goes!

## Instrument Society Sets Meeting Tonight At 6

Gorden F. Stiles, Fisher Governor Company, will speak at the Oak Ridge Section of the Instrument Society of American tonight. The meeting is set for tonight, Wednesday, March 6, at the Holiday Inn, Oak Ridge.

Stiles will speak on "Notable Exceptions to the Basic Liquid Sizing Equation." The dinner meeting begins with a social hour at 6 p. m.

## Physics Information Is Seminar Topic Friday

C. F. Barnett, Thermonuclear Division; W. T. Milner, Physics Division; W. B. Ewbank, Nuclear Data Group; and N. B. Gove, Mathematics Division, will discuss "Physics Information Storage and Retrieval at ORNL" at this week's Physics Division seminar.

The seminar is set for Friday, March 8, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.



PROUD PAPA FRED BOONE, SS Warehousing and Shipping, holds little Kimberly Renee Boone, who was born January 13 . . . this year. The Boones live at 143 North Beverly Circle, Oak Ridge, and Kim is their first.





**THE EIGHTBALLS** are an old-time team in the Classic League. In the front row are Robert Hopper and Lance Walthald, left to right. In the back row are Frank Marlin, Sam Bishop and Captain John Towle.

## Recreation



**Saturday, March 9**  
TECHNICAL DINNER-DANCE:  
Social Hour 6 p.m. Dinner 7:30,  
Dance 9. Holiday Inn.

**Monday, March 11**  
BASKETBALL: Beginning 6:30  
p.m. Oak Ridge High School  
Gym. Bat Boys vs. K-25 Falcons;  
Health Physics vs. Sharp Shots;  
Chargers vs. Bombers.

TABLE TENNIS: 7 p.m. Oak  
Ridge Wildcat's Den.

BOWLING: C League, 5:45 p.m.  
Oak Lanes.

PHYSICAL FITNESS: (For  
Women) 7:30 p.m., Oak Ridge  
High School Girls' Gym.

**Tuesday, March 12**  
PHYSICAL FITNESS: (For  
Men) 7:30 p.m., Oak Ridge High  
School Gym.

CAMERA CLUB: 8 p.m. First  
Presbyterian Church Fellowship  
Hall.

**Wednesday, March 13**  
BASKETBALL: Beginning 6:30  
p.m. Oak Ridge High School  
Gym. Atoms vs. Radioisotopes;  
TK's vs. Bombers; Eagles vs.  
Combustion.

BOWLING: Mixed League, 8  
p.m. Ark Lanes.

**Thursday, March 14**  
BOWLING: 5:45 p.m. Classic  
League, Ark Lanes.

BADMINTON: Informal Play,  
employees and spouses. 7:30 p.m.  
Jefferson Junior High School.

VOLLEYBALL: Beginning 6:30  
p.m. Court A: Naughts vs. K-25  
Hawks; Charley Browns vs. Dirty  
Half-Dozen; Court B: Set Ups vs.  
Ecobums; K-25 Gashouse Gang  
vs. Neophytes; Mix Ups vs. Beav-  
ers.

**Friday, March 15**  
ATTENTION JULIUS CAE-  
SAR: Stay Home!

No investment pays better divi-  
dends than safety.

## Bombers Keep Tie In Basketball

Nine big basketball games be-  
came history last week as the  
League double-timed it, so that  
the season could end before an-  
other season has been edged into.

Monday's action started as the  
Bat Boys fell victims to the Com-  
bustion team, 40 to 30.

Bobby Belt braved the field  
with 12 points . . . Jim Meiche  
scored nine for the losers as the  
Combustion boys capitalized on a  
second quarter gallop.

Health Physics put up win  
number six this time demolish-  
ing the Chargers. Jim Treadwell  
and Bob Compton each scored 18  
points for the big HPers, and  
Larry Finch dropped 16 through  
the hoop. Ray Leffler led the  
losers with 18 also . . . Larry De  
Roos scored 10.

The Radioisotopes deactivated  
the Falcons in Monday's final ac-  
tion, 51 to 46. Churchhill Moore  
scored 19 for the losers . . . Frank  
O'Donnell did likewise for the  
winners.

### EAGLES DOWN ATOMS

Tuesday's action started as two  
Y-12 teams were pitted against  
each other . . . the Eagles soaring  
over the Atoms 61 to 37. Ron  
Gamrot opened up, scoring 16;  
Dick Boughner 15; Larry Mc-  
Donald 14; Jerry Raper, 12 . . .  
all to the favor of the Eagles.

The Atoms saw Tim Butler  
score 11 . . . Don Forrester 10.

The Combustion combo took on  
the Falcons, 49 to 36 in Tuesday's  
second foray. Church Moore led  
the losers with 12 . . . Larry Sel-  
vidge scored 21 for the winners  
Bobby Belt 13.

### BOMBERS WIN BIG

The Bombers belted a Y-12  
team, the Bat Boys in Tuesday's  
final play . . . 79 to 35. Jim  
Shoemaker put 29 points on the  
board . . . Roy Nabors, 16; Tom  
Kress, 15 and Karl Bertis, 10 . . .  
all for the winners. Hugh Beeson  
scored 11 for the losers, Jim  
Meincke, 10.

Wednesday's games began as  
the Y-12 Eagles clawed their way  
past the Sharp Shots 79 to 24.  
The Eagles used the fast break  
to "break" the game wide open  
from the starting gun. Larry  
MacDonald led the high-flying  
squad with 24 big points.

John Gilbert scored 14 for the  
losers.

The Bombers belted the K-25  
Falcons 86 to 49, unloading in the  
very first quarter. Everybody on  
the Bombers squad got in on the  
scoring act . . . Herm Thomas, 15;  
Bob Alred, 18; Roy Nabors, 14;  
Homer Tucker and Tom Kress,  
10 each.

The TK's knocked out the  
Atoms in the week's final game  
53 to 41. The Atoms were  
game, but the TK's refused to let  
them catch up. The TK-men con-  
trolled both boards, and allowed  
only one Atom to penetrate their  
defense, Jim Batch.

The TK's big guns were Doug  
Raymer and Dick Hudson, each  
with 15 and Jerry Goddard, 14.

Team	W	L
Health Physics, ORNL	6	0
Bombers, ORNL	6	0
Eagles, Y-12	5	1
TK's, ORNL	4	2
Radioisotopes, ORNL	3	2
Combustion, ORNL	3	4
Chargers, Y-12	2	4
Atoms, Y-12	3	5
K-25 Falcons	1	6
Bat Boys, Y-12	0	7

## Eagles New Leaders On Classic Alley

The Eagles jumped to a half-  
point lead in the Classic Bowling  
League last week after a four-  
point romp over the Markers.  
Other sweeps went to the All  
Stars around the Has Beens, the  
Playboys past the Swingsters and  
the Tigers towering over the  
Cubs.

Three points went to the Smelt-  
ers by the Eightballs and the  
Screwballs' round the Rebels. Two  
and one-half points went to the  
Pinbusters over the Splinters, and  
the Rippers and Bumpers shared  
two.

E. V. Hawk, Eagles, rolled a  
225 scratch game . . . and Dillard  
Jenkins, Screwballs, scored a 248  
handicap single. On series it was  
Bill Stephens, Bumpers, with 595  
scratch, and John Kimsey, Eagles,  
with a 662 handicap series.

The Eagles swept all team hon-  
ors . . . singles of 948 scratch,  
1063 . . . series of 2691 and 3036!

League standings follow:

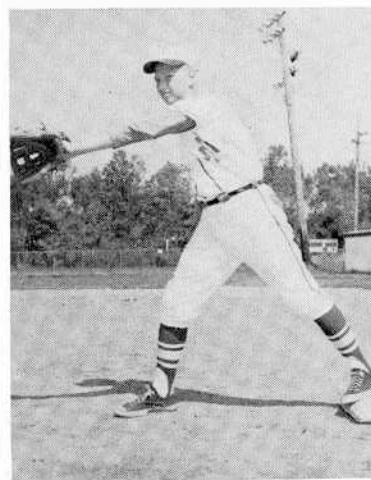
Team	W	L
Eagles	25	15
Pinbusters	24 1/2	15 1/2
Rippers	23 1/2	16 1/2
Swingsters	23	17
Bumpers	23	17
Markers	22 1/2	17 1/2
All Stars	21 1/2	18 1/2
Eightballs	20	20
Playboys	20	20
Tigers	19 1/2	20 1/2
Has Beens	19	21
Rebels	19	21
Splinters	17 1/2	22 1/2
Cubs	15	25
Smelters	14	26
Screwballs	13	27

## Shifters Release Names Of Winners

E, F, G, H and J Shifts list  
their big game night of February  
10 as a success.

Winners selected an Accept-A-  
Gift-Book (which means they  
can take their choice of a multi-  
ple-array of fine items.)

Winners were listed, in the 18  
games, as Mrs. Carl G. Brewster,  
Mrs. Ray Mackey, Mrs. C. B.  
Burris, Mrs. Jymme Campbell,  
Janie Watson, Anna Perry, Mrs.



**BUSTER SKEEN**, son of B. L.  
Skeen, had a 10 win-no loss  
record last summer and fall  
with the Inskip-Norwood All  
Stars. Buster, along with Mike  
(son of Gene) Huskisson, aver-  
aged 15 strike-outs in their 17  
win-no loss record. Both boys  
helped put the local team in the  
semi-finals in the state tourna-  
ment. Johnson City eliminated  
them in a thriller, 5 to 4.

## Volleyball Victors All Take Sweeps

Four-game sweeps were the  
news from Volleyball play last  
week, as every winner scalped  
his victim for the full count.

On Court A, Y-12's Beavers  
bested the Set-Ups 15-9, 15-2,  
15-7, and 15-8. The Old Men  
ousted the K-25 Gashouse Gang  
15-0, 15-4, 15-3, and 15-10. The  
Dirty Half Dozen squeezed out  
the Mix-Ups 15-1, 15-6, 15-9 and  
15-6.

Meanwhile, on Court B the Neo-  
phytes pulverized the Naughts  
15-7, 15-9, 15-10 and 16-4. The  
Mountaineers tamed the Charley  
Browns 15-8, 15-8, 15-12 and 15-5.

The Ecobums edged by the  
K-25 Hawks 15-9, 15-10, 15-7 and  
15-8.

Team	W	L
Beavers, Y-12	4	0
Neophytes, Y-12	4	0
Mountaineers, Y-12	4	0
Ecobums, ORNL	4	0
Old Men, ORNL	4	0
Dirty Half Dozen	4	0
Set Ups, ORNL	0	4
Naughts, ORNL	0	4
Charley Browns, ORNL	0	4
K-25 Hawks	0	4
K-25 Gashouse Gang	0	4
K-25 Mix Ups	0	4

## Hits & Misses Edge Into Mixed Lead

The Hits & Misses edged out in  
front of the Mixed Bowling  
League last week, after a four-  
point win over the Goofers. The  
Alley Cats had the only other  
sweeping win of the night at the  
expense of the Mustangs.

The Roses 'N Thorns took three  
from the Twisters, and the Mc-  
Sprays also won three from the  
Rollers.

Roy Worley, Roses 'N Thorns,  
rolled high for men, singles of  
202 scratch, 236 handicap . . .  
series of 578 scratch, 680 handi-  
cap.

Barbara Hackett, also of the  
Roses 'N Thorns, rolled high . . .  
singles of 187 and her 231 handi-  
cap single tied with teammate  
Dessie Worley. Barbara's 479  
scratch was high . . . and Donna  
Ferguson, Twisters, rolled a 615  
handicap series.

The Roses 'N Thorns waxed  
hot, taking all team honors . . .  
singles of 705 scratch, 861 handi-  
cap . . . series of 2009 scratch,  
2477 handicap.

Team	W	L
Hits & Misses	26	14
Roses 'N Thorns	25	15
McSprays	22	18
Rollers	21	19
Mustangs	20	20
Goofers	17	23
Twisters	16	24
Alley Cats	13	27

## Dick Huber Takes Most Top Scores In Alley Tourney

Y-12 crowned a new bowling  
champion last week-end in its an-  
nual tournament, and Dick Huber  
could do no wrong. His All Events  
scratch score was 1784.

Elmer Johnson and Bob Forse-  
man tied for handicap honors in  
All Events, each with a pin-fall  
of 1902.

Big team of the tournament was  
the Has Beens with a scratch  
total of 2588 . . . while the Sun-  
flowers captured money with a  
handicap high of 2965. (The Has  
Beens are composed of Sewell  
Brown, Bobbie Rutherford, J. E.  
Cheek, Rudy Pletz, and Roy Rob-  
erts. The Sunflowers are Spence  
Ferguson, W. C. Smith, R. S.  
Hopper, Bob Hagood and Roy  
Worley.) Team also placing in  
the money were the Splinters,  
2942; Eagles #1, 2924; Has Beens,  
2918; and PinBusters, 2891.

Woman champion was Lou Sahr,  
from the Mixed League, rolling  
1505 All Events scratch score.  
Irene Carmack rolled an 1804  
handicap total. Lou and Donna  
Ferguson took handicap honors  
in women's doubles with a com-  
bined 1188 . . . while scratch tops  
went to Bobbie Hill and Lou An-  
finson. Lou Sahr rolled high sin-  
gles . . . 522 and Joe Bratton rolled  
a 628 handicap in singles.

Men's doubles went to L. E.  
Sikes and Norm Jarvis, who rolled  
a 1149 . . . Aaron Smith and  
J. E. Morgan took money with a  
1258 handicap.

Men's singles went to Huber,  
with 597 . . . and George Bailey  
took handicap honors easily with  
a 657.

Mixed Doubles tops went to  
Louise Warmly and Ray Eskridge  
with a 1227 handicap score. Peggy  
Hardin and J. E. Morgan rolled  
high scratch scores in Mixed Dou-  
bles, 1057.

The Y-12 alley convention saw  
a total of 25 men's teams compete  
with 54 duos rolling in dou-  
bles, and 108 in singles. A total  
of 19 mixed doubles rolled, and  
eight women's doubles, 16 singles  
represented female entries in the  
big tournament.

The Y-12 tournament was held  
Saturday and Sunday, March 2  
and 3 at Ark Lanes, Oak Ridge.

## Parbusters Push Into C Alley Lead

The Parbusters pushed their  
way into the C Bowling League  
lead last week via a three-point  
win over the Big Five.

The Rounders moved up to tie  
for second place with a four-point  
win over the Invalids. Also tak-  
ing four it was the Badgers over  
the Rodders, and the King Pins  
past the Fireballs.

The HiLifters had the Sunflow-  
ers for three points . . . and the  
Royal Flush and Rollmasters  
shared two points.

E. Croley, HiLifers, earned  
high singles count . . . scratch  
of 230, handicap 252. Ray Gal-  
ford, Sunflowers, scored a 588  
scratch series; while Tom Watts,  
Badgers, bowled a 636 handicap  
series.

The Badgers were best team-  
wise. . . all the way . . . singles  
of 936 scratch, 1061 handicap . . .  
series of 2665 (a new season  
high) and 3040 handicap!

Team	W	L
Parbusters	23	9
Sunflowers	22	10
Rounders	22	10
Badgers	20	12
HiLifters	19	13
King Pins	15	17
Big Five	14	18
Royal Flush	13	19
Rollmasters	12	20
Rodders	11	21
Invalids	11	21
Fireballs	10	22





**HOW DO THINGS LOOK? . . .** CBS News Correspondent Walter Cronkite, left, and science writer Lord Ritchie-Calder discuss tomorrow's world on "The 21st Century" report "How Do Things Look?" Sunday March 10, at 6 p.m. EST, in color on the CBS Television Network. The program is carried locally over WBIR-TV, Channel 10. Cronkite is principal reporter for the series, produced by CBS News and sponsored in the public interest by Union Carbide Corporation.

## Tomorrow's World Will Be What Man Decides He Wants Today Experts Believe

Tomorrow's world will be what man decides he wants today. But what does he really want, and why?

Since the dawn of time mankind has constantly sought the elusive answer to this question. Its meaning and man's innate power to dictate his own future will be analyzed by a panel of leading futurists in "The 21st Century" report "How Do Things Look?" this Sunday, March 10, at 6 p.m., EST, in color on the CBS Television Network. The program is aired locally over WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite,

principal reporter for the series, will moderate the broadcast, which is sponsored in the public interest by Union Carbide Corporation.

Participating in the broadcast with Cronkite will be:

Lord Ritchie-Calder, journalist, science writer and professor of International Relations at the University of Edinburgh.

Rene Dubos, a faculty member of Rockefeller University and a specialist in biology and ecology.

John Cogley, former religion editor of the *New York Times* and now editor of *The Center Magazine* at the Center for the Study of Democratic Institutions, Santa Barbara, California.

Roy McMullen, fine arts consultant, contributing editor to such publications as *Realites* and *Horizon*, and author of a forthcoming book on painter Marchel Chagall.

Robert Maynard Hutchins, chairman of the *Encyclopedia Britannica* Editorial Board and president of the Center for the Study of Democratic Institutions.

During the broadcast they will explore the ideas and achievements of this century and what their possible effect will be upon people in the 21st century. Areas of special interest include the youth movements; ecumenism in both science and religion; education and the future rights of the individual in the man-made environment of the 21st century.

All five guests on "How Do Things Look?" are contributors to *Britannica Perspectives*, a series of book-length essays aimed at helping man comprehend not only the world of today, but also the directions and tendencies of the world of tomorrow that are developing today. Perspectives will be published March 10.

Fred Warshofsky is science editor for the series; Isaac Kleiner, producer; and Burton Benjamin, executive producer. "The 21st Century" is produced by CBS News.

### GROUNDING LUGGAGE

One airlines promises that passengers' luggage will be waiting at the gate upon alighting from the plane. To live up to their promise, they keep passengers' locked in the planes for a half hour after each landing.

## IEEE Meeting Set Thursday March 14

"How Pumped Storage Hydroelectric Generation Pays Off" is the subject of the monthly Institute of Electric and Electronic Engineers' meeting next Thursday, March 14, at 7:30 p. m. in the Green Room of the Ridge Recreation Hall.

A short color movie will be shown describing the principles of pumped storage power generation. F. A. Dale, hydro-electric consulting engineer with the Tennessee Valley Authority will discuss some of the typical installations in this country and abroad, followed by presentation of data illustrating the economic and operational advantages of applying pumped storage generation to electric utility nuclear and fossil fuel thermal generation systems.

## Bright Oak Ridge Future Seen

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satisfy the inventory requirements of another reactor of the same size."

Sapirie noted that another type of breeder reactor—the Molten Salt Reactor now being developed at the Oak Ridge National Laboratory—should roughly double the raw material reserves for the future requirements of nuclear power because it will permit use of thorium as well as uranium-238 as a source material.

"I share with Al Weinberg (Dr. Alvin Weinberg, Director, Oak Ridge National Laboratory) and his associates their enthusiasm for this approach," Sapirie said.

### Y-12 Proposal Explained

Commenting on the recently announced increase in the weapons program at the Y-12 Plant, Sapirie said, "... you should not anticipate seeing construction of a major new plant in the Y-12 area or a tremendous expansion of worker population." Most of the cost he pointed out will go toward replacement of machine tools and process equipment for new fabrication techniques.

He cautioned that the \$178 million requested in the budget for Y-12 for the project, and the estimates for other AEC plants are based on current work load projections and may change when final weapons designs are established and final work load assignments are determined.

"During recent years management and labor at the Y-12 Plant have developed a reputation for accomplishing extremely difficult assignments on schedule, adequately and efficiently," said Sapirie. "I am convinced that with a continuation of this quality of performance, Y-12 will continue to get its full share of new assignments."

### 'The Fine Balance'

He pointed out, however, that Y-12 has competition from other AEC facilities which are also quite capable. "... we wouldn't have to stub our toe very hard to upset the fine balance now favoring Oak Ridge," Sapirie added.

Also outlined was recent progress in the AEC's Plowshare Programs, developed to explore peaceful applications for harnessing the power of nuclear explosions. The Y-12 Plant has participated in producing the nuclear devices for these experimental test shots.

Sapirie commended the record set last year by Oak Ridge National Laboratory in radioisotope



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'Last Fling Before Spring'

## Ticket-Sellers Busy Hawking Ducats For Technical's Big Dance Saturday Night

If you haven't seen Mildred Morris, Daisy Ward, Earl Price, Mike Sherrill, Sandra Estes, Jack Gresham, Max Scott and Ruby McCloud . . . don't blame us. They are hawking tickets to Tech-

nical's big dance Saturday night. Technical personnel are attacking the Holiday Inn Saturday, March 9, for their big "last fling before Spring" party. Charlie Baker and his orchestra will provide music for the outfit.

There'll be dinner, a social hour . . . and dancing . . . with the get together set at 6 p.m. Dinner is served at 7:30, and dancing gets under way at 9.

If you haven't purchased your ticket you'd better see any of the above. Space is limited and only a certain number of tickets may be sold!



Car pool members wanted from East Village, Oak Ridge, to any portal, straight day. Don Carey, plant phone 3-7728, home phone Oak Ridge 483-4970.

Ride wanted or will join car pool, from Cumberland Estates area, Knoxville, to Bear Creek Portal, straight day. Danny Showan, plant phone 3-5941, home phone Knoxville 588-5874.

Will join car pool from North Hills section, Knoxville, to West Portal, J Shift. W. E. Cagle, plant phone 3-5643, home phone Knoxville 524-8783.

Ride wanted from Circleview Subdivision, Karns, to Biology Portal, or North Portal, straight day. Lois McGinnis, plant phone 3-7327, home phone Knoxville 584-6900.

shipments—3,600,000 curies. He said it was even more impressive when compared to the first shipment of radioisotopes for civilian use almost 22 years ago, which was only one-thousandth of a curie.

He cited ORNL not only as the center for the AEC's radioisotope program, but also as the leader in the Commission's transuranium research. He also referred to other recent developments in the field of atomic energy with important implications for Oak Ridge, including nuclear desalting, agro-industrial energy centers, and cancer research.

## RESA Will Hear Behavior Expert

The Oak Ridge branch of the Scientific Research Society of America will hear Dr. Neal E. Miller, Rockefeller University, tomorrow, Thursday, March 7. The meeting is set at 8 p. m. in the Jefferson High School auditorium.

Dr. Miller was appointed professor in the new behavioral sciences program at Rockefeller University, formerly the Rockefeller Institute for Medical Research, in New York in 1966. He received his BS degree from the University of Washington, his MA from Stanford and his PhD from Yale. He was professor of psychology at Yale from 1950-1966, and received the National Medal of Science in 1964. He is a member of the National Academy of Sciences and the National Research Council. Dr. Miller has been the recipient of numerous other awards and honors in recognition of his scientific accomplishments.

He will speak on "Behavior Motivated by Chemical Stimulation of the Brain."

There is no charge for tomorrow's RESA meeting and the public is invited to attend.

## Several Ping Pong Matches Are Played

Several matches got under the wire in the Table Tennis leagues last week. In the X crowd, it was leader Geoffrey Newman downing Jerry Keyes for three games. Loyd Wyatt also downed Keyes for three, and Roy Huddleston for two.

Bill Motley won three games from Herve Derrien

Player	W	L
Geoffrey Newman	34	2
Loyd Wyatt	23	13
Herve Derrien	17	19
Roy Huddleston	17	19
Herb Mook	16	17
Bill Motley	16	17
Bill Foutz	8	19
Jerry Keyes	4	23

In the Y League, Al Norris won two at the expense of Fred Wetzel, and Rokuro Oyamada won two from Wetzel . . . also three from Bob Brown via forfeit. Francois Kertesz defeated Wetzel for two.

Y League standings:

Gordon Brewer	25	8
Bob Coveyou	22	3
Ed Gambill	25	11
Paul Kasten	22	11
Al Norris	23	13
Fred Wetzel	14	16
Art Weinberger	9	16
Rokuro Oyamada	11	19
Francois Kertesz	9	24
Bob Brown	0	30

Bill Smith, Z League leader, won three games from Joe Lewin. A. B. Meservy downed Dave Allen and Winfred Collins, both for three games.

Tudor Boyd defeated Collins all the way and won a forfeit three-game win from Dave Allen.

Z League standings:

Bill Smith	29	1
Ken Toth	9	3
A. B. Meservy	19	11
Joe Lewin	18	12
Bill Hackett	12	9
Tudor Boyd	6	12
Dave Allen	6	21
Winfred Collins	0	30